drainage is one of the first requisites to increased healthfulness. Whilst thinly settled districts may not be able to institute proper precautions, yet the larger towns can drain the ponds, low places, roads and mother earth generally in their vicinity.

In the last column of the previous table is seen the reduction in the death-rate from phthisis of twelve English towns. "This saving of life is ascribed to the effect of drainage works in drying the subsoil of those places."

In this State, Salisbury may be given as an instance where the drainage of a large pond near the town has very largely diminished the prevalence of malarial fevers.

Subsoil Drainage.—In the subsoil drainage of streets and roads, *covered drains*, formed of rock or tile, should be used in preference to open drains. Open drains, unless the soil is very tenacious, and can stand at a steep slope, take up too much space. Besides they are constantly needing repairs and often hold stagnant water and decayed filth; so that in some countries their courses have been marked by excessive ravages of cholera over adjoining districts.

A given tract of land is best drained for agricultural purposes by stone or pipe drains of 1 to 2 inches diameter, running straight down the hill-sides (when not too steep) in parallel rows, 25 to 50 feet apart, and 30 to 36 inches below the surface. These small drains discharge into larger intercepting drains, run down the hollows; and these, in turn, empty into larger drains (that may often be open) that follow the courses of the valleys and perhaps serve as the water channels of small streams. Such draining necessarily ensures a deep, mellow soil, that not only satisfies the needs of agriculture, but is in perfect keeping with the requirements of health. Towns should at least keep the subsoil dry, by covered drains run along the streets and elsewhere, at sufficient depths to drain the cellars thoroughly and to prevent standing pools of water.

Tile drains 2 inches in diameter, under the side-ditches, or one 3-inch drain under the middle of the road, is sufficient generally. An outlet drain should run from the depressions in the road. A